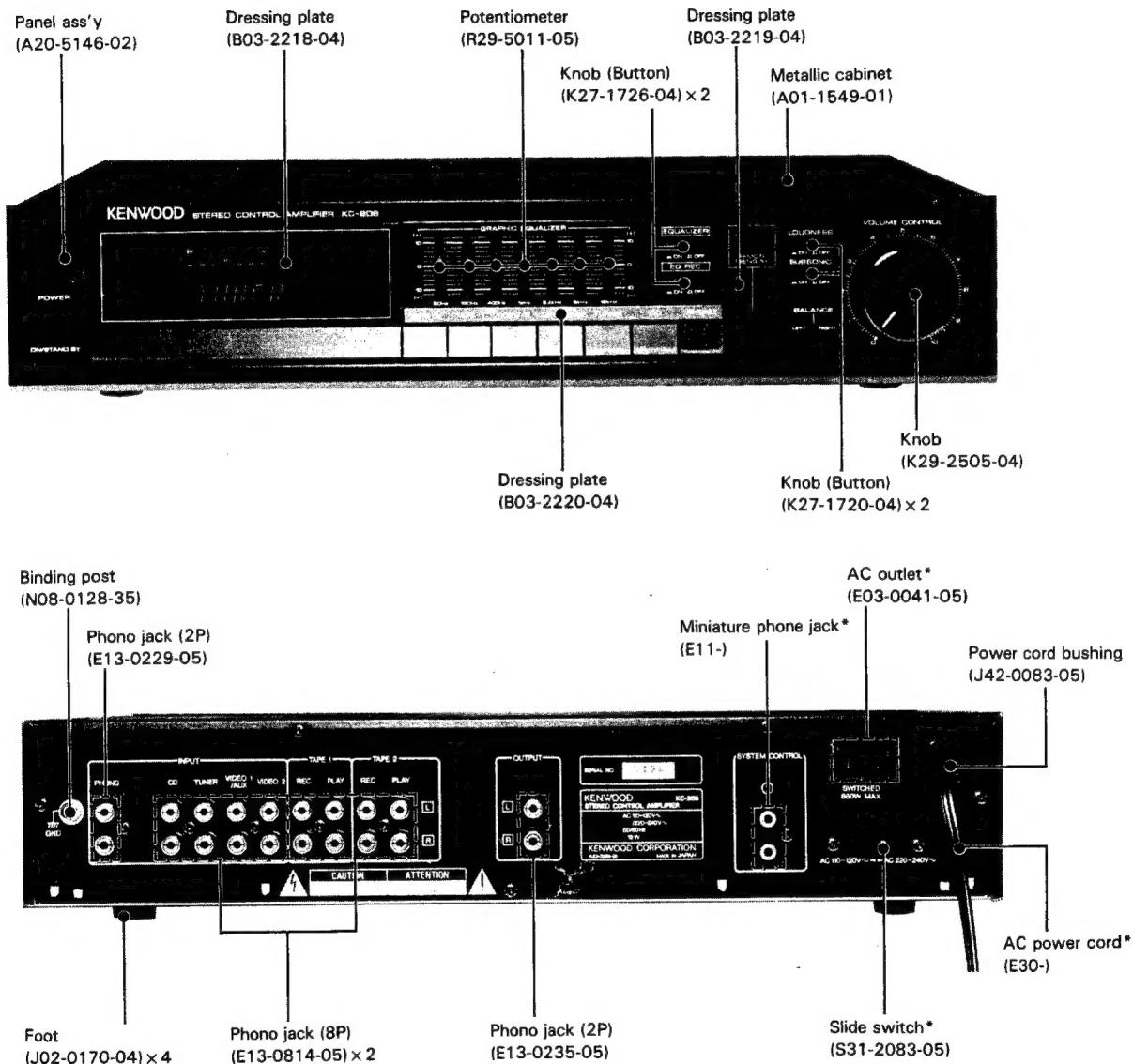


STEREO CONTROL AMPLIFIER  
**KC-206**  
 SERVICE MANUAL

**KENWOOD**

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 B51-3185-00(T)1606



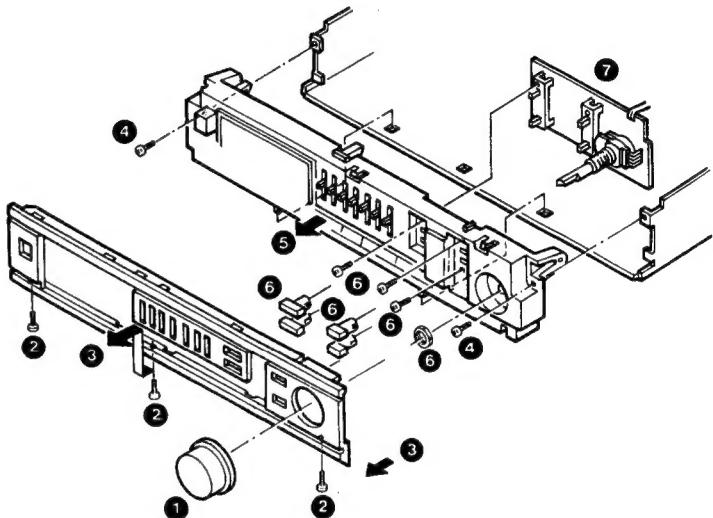
\*Refer to parts list on page 18.

## CONTENTS

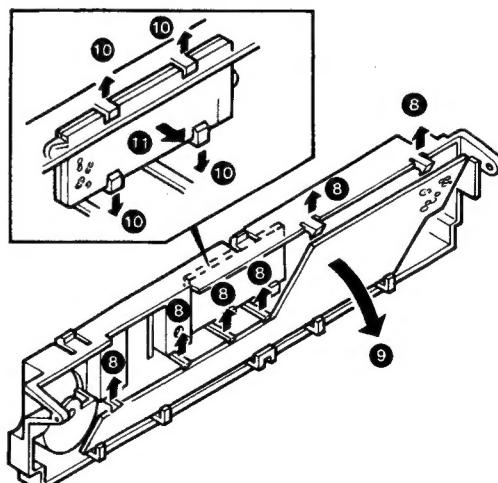
|                              |   |                       |            |
|------------------------------|---|-----------------------|------------|
| DISASSEMBLY FOR REPAIR ..... | 2 | CIRCUIT DIAGRAM ..... | 13         |
| BLOCK & LEVEL DIAGRAM .....  | 3 | EXPLODED VIEW .....   | 17         |
| CIRCUIT DESCRIPTION .....    | 4 | PARTS LIST .....      | 18         |
| VOLTAGE TABLES .....         | 8 | SPECIFICATIONS .....  | Back cover |
| P.C. BOARD .....             | 9 |                       |            |

## DISASSEMBLY FOR REPAIR

1. Remove the metallic cabinet before performing the following operations.
2. Pull out the 1 knob from the shaft (1).
3. Remove the 3 screws fixing the front panel to the sub panel (2).
4. Remove the front panel in the direction of the arrow by sliding lower side (3).
5. Remove the 2 screws fixing the sub panel to the chassis (4).
6. Remove the sub panel in the direction of the arrow (5).
7. Pull out the 4 buttons from the shafts, remove the 1 nut, and remove the 3 screws fixing the Audio Unit (X09-2420-10) (C/5) onto the sub panel (6).
8. Remove the Audio Unit (X09-) (C/5) from the sub panel (7).

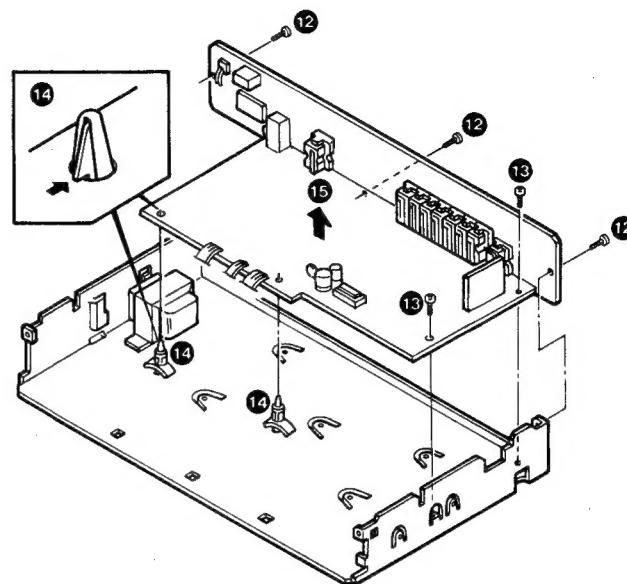


9. Disengage the 6 claws of the sub panel which retain the Audio Unit (X09-) (B/5) (8).
10. Remove the Audio Unit (X09-) (B/5) in the direction of the arrow (9).
11. Disengage the 4 claws of the sub panel which retain the potentiometer (Graphic Eq.) (10).
12. Remove the potentiometer (Graphic Eq.) from the sub panel (11).

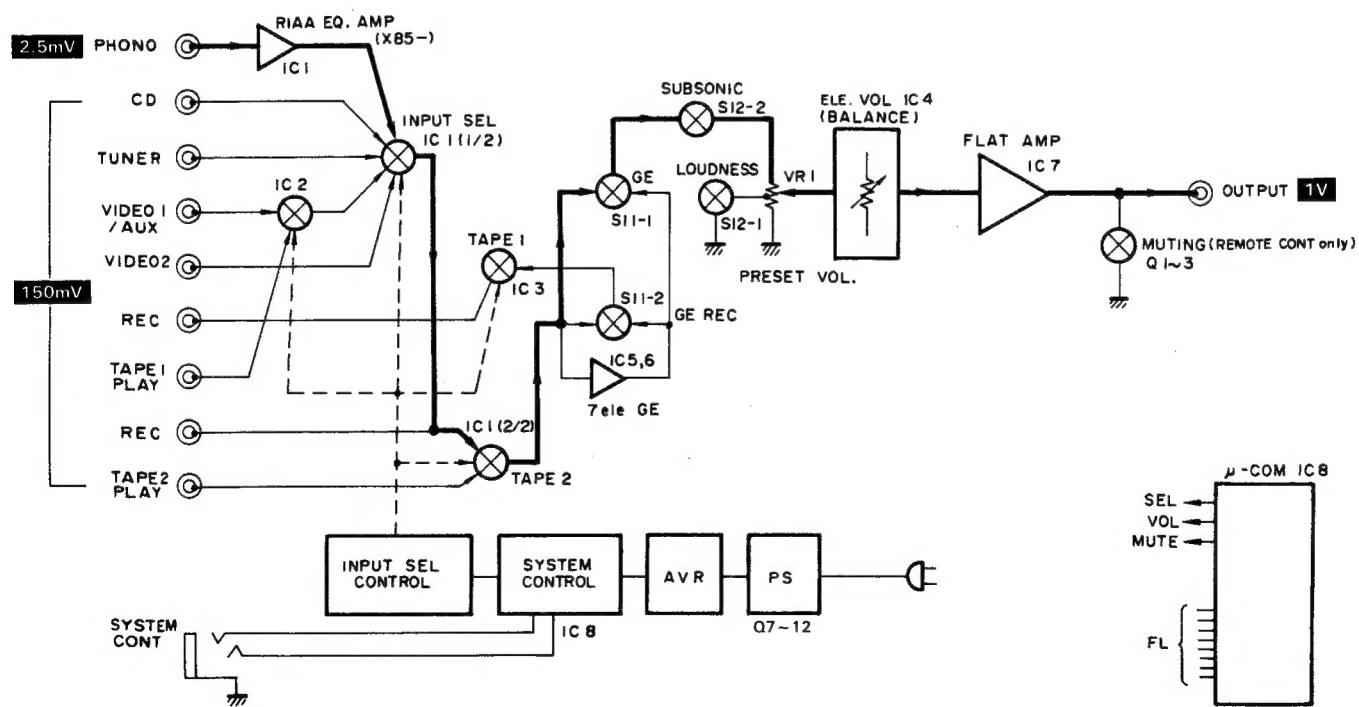


## DISASSEMBLY FOR REPAIR/BLOCK &amp; LEVEL DIAGRAM

13. Remove the 3 screws fixing the rear panel to the chassis ( 12 ).
14. Remove the 2 screws fixing the Audio Unit (X09-) (A/5) to the chassis ( 13 ).
15. Disengage the Audio Unit (X09-) (A/5) from the 2 unit holders ( 14 ).
16. Remove the Audio Unit (X09-) (A/5) together with the rear panel, in the direction of the arrow ( 15 ).



## BLOCK &amp; LEVEL DIAGRAM



## CIRCUIT DESCRIPTION

## DESCRIPTION OF COMPONENTS

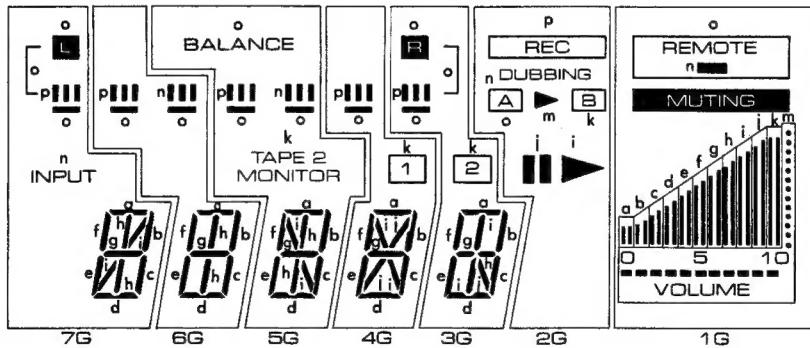
## Audio unit (X09-2420-10)

| Component | Application/function      | Operation/condition/compatibility   |
|-----------|---------------------------|---|
| Q1 ~ 3    | Muting                    | Muting during selector switching.   |
| Q4 ~ 6    | Driver                    | Drivers of ICs 2 and 3 control signals.   |
| Q7 ~ 10   | Regulated power supply    | $\pm 14$ V.   |
| Q11       | Relay driver              | Driver of SW outlet switching relay.  |
| Q12       | Regulated power supply    | +5 V.   |
| Q13       | FL driver                 |   |
| Q15       | Inverter                  |   |
| Q16 ~ 18  | Muting                    | Muting during RE2 selector switching.   |
| IC1       | Selector                  | Switches and selects input signals.   |
| IC2, 3    | Selector                  | Switch between VIDEO 1 and PLAY 1.  |
| IC4       | Electronic volume control | Controls the level of the signal output at PRE OUT. (0 to -76 dB)                 |
| IC5, 6    | Graphic equalizer         | 7 points; 60, 150, 600, 1k, 2.4k, 6k, 15kHz. ( $\pm 10$ dB)                       |
| IC7       | Amplifier                 | 16 dB gain.   |
| IC8       | Microprocessor            | Control of ICs 1, 2, 3 and 4, and of data communications. (With synchro function) |

## Preamplifier unit (X85-1030-12)

| Component | Application/function | Operation/condition/compatibility |
|-----------|----------------------|-----------------------------------|
| IC1       | EQ amplifier         | For phono.                        |

## FL display (FIP8AMW24)



## Terminal connection

| Terminal No. | 1    | 2  | 3  | 4    | 5     | 6     | 7     | 8  | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
|--------------|------|----|----|------|-------|-------|-------|----|------|------|------|------|------|------|------|------|------|------|
| Electrode    | F    | F  | NP | 8G   | P(A1) | P(A2) | P(A3) | 8G | P(a) | P(b) | 7G   | P(l) | 6G   | P(p) | 5G   | P(n) | P(o) | P(m) |
| Terminal No. | 19   | 20 | 21 | 22   | 23    | 24    | 25    | 26 | 27   | 28   | 29   | 30   | 31   | 32   | 33   | 34   | 35   | 36   |
| Electrode    | P(k) | 5G | 4G | P(j) | P(l)  | 3G    | P(i)  | 2G | P(h) | P(f) | P(g) | 2G   | P(e) | 1G   | P(d) | P(c) | P(b) | 1G   |
| Terminal No. | 37   | 38 | 39 |      |       |       |       |    |      |      |      |      |      |      |      |      |      |      |
| Electrode    | P(a) | F  | F  |      |       |       |       |    |      |      |      |      |      |      |      |      |      |      |

Notes

F: Filament

NP: No Pin

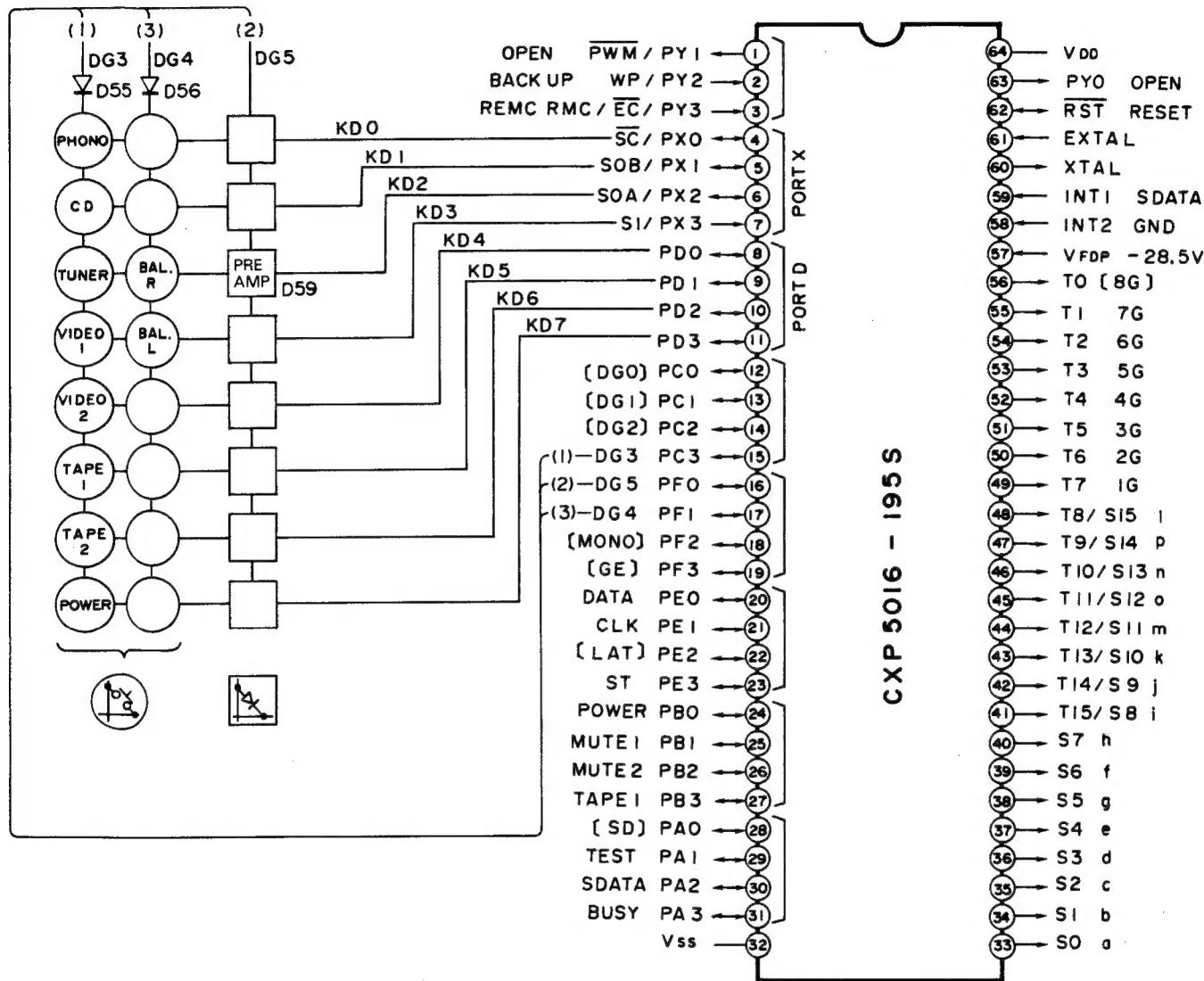
G: Grid

P: Anode

## CIRCUIT DESCRIPTION

Microprocessor IC: IC8 (CXP5016-195S)

Key matrix connection



## Terminal function

| Pin No.     | I/O | Name           | Function   |
|-------------|-----|----------------|--|
| 1           | O   |                | Permanently H. Set to Open in actual operations.   |
| 2           | I   | BACK UP        | Normally H is input. When L is input, the microprocessor stops oscillation and enters the backup mode. The backup mode is released when the input returns from L to H. |
| 3           | I   | REMC           | Remote control signal input. L active.   |
| 4~11        | I   | KD0~KD7        | Key return signal inputs. H active.  |
| 12~15<br>17 | O   | DG0~DG3<br>DG4 | Key digit outputs. Normally H output. Key scanning occurs when a key is pressed on.  |
| 16          | O   | DG5            | Digit output for diode switch function. H output when AC power supply is turned on.  |
| 20          | O   | DATA           | Serial data output from controlling CX7977 (selector IC) and CX7978 (electronic volume control). Latched at the rise of CLK.   |

## CIRCUIT DESCRIPTION

| Pin No. | I/O | Name   | Function   |
|---------|-----|--------|--|
| 21      | O   | CLK    | Shift clock output for transmitting data to CX7977 and CX7978. Data is latched at the rise of CLK. |
| 23      | O   | ST     | Data latch output for CX7977 and CX7978. Data is latched at the rise.                              |
| 24      | O   | POWER  | Relay ON/OFF port. H for relay ON.   |
| 25      | O   | MUTE 1 | Line output muting terminal. L for muting.   |
| 26      | O   | MUTE 2 | TAPE 2 REC output muting terminal. L for muting.   |
| 27      | O   | TAPE 1 | Selector TAPE 1 terminal. H when TAPE 1 is selected.   |
| 29      | I   | TEST   | Test mode setting terminal. Test mode occurs when AC power supply is turned on with L.             |
| 30      | O   | SDATA  | Serial data output.  |
| 31      | I/O | BUSY   | Serial BUSY terminal.  |
| 32      | —   | VSS    | GND.   |
| 33~48   | O   | a~p    | FL drive segment terminals.  |
| 49~56   | O   | 1G~8G  | FL drive digit terminals. $244\mu \times 8$ digit=Sync.  |
| 58      | I   |        | Not used. To be short-circuited with Vss or Vdd.   |
| 59      | I   | SDATA  | Serial data input. In use, short-circuit with pin 30.  |
| 63      | O   |        | Permanently H. Set to Open in actual operations.   |
| 64      | —   | VDD    | +5V.   |

## Function &amp; operation description

## Operation Transition Chart

| Key Pressed<br>Current Mode                  | POWER                            | PHONO<br>CD<br>VIDEO 1<br>VIDEO 2<br>TAPE 1           | TUNER              | TAPE 2   | VOLUME<br>UP/DOWN                             | BALANCE<br>L/R                                       | MUTING   |
|--|----------------------------------|---|--------------------|--|---|--|--|
| Immediately after power on (SELECTOR: TUNER) | Power turned OFF, FL turned OFF. | Switched to corresponding input.                      | No change.         | TAPE 2 monitoring. No change in TAPE 2 REC OUT.                      | Volume changed up or down, with dB indicated. | Balance moved left or right, with BALANCE displayed. | -20 dB muting, with MUTING indicator flashing. |
| SELECTOR position: Other than TUNER          | ↑                                | ↑   | Switched to TUNER. | ↑  | ↑   | ↑  | ↑  |
| TAPE 2 monitoring                            | ↑                                | TAPE 2 monitoring unchanged. TAPE 2 REC OUT switched. | ←                  | TAPE 2 monitoring canceled, and switched to current SELECTOR source. | ↑   | ↑  | ↑  |

## 1. Amplifier facilities

## • Input selector function

The input sources are selected by pressing the PHONO, CD, TUNER, VIDEO 1, VIDEO 2 and TAPE 1 keys. The selected source is displayed in characters on the FL tube display, at the same time as "INPUT" is illuminated.

The INPUT SELECTOR is not accepted while TAPE 1 deck

is recording, unless during dubbing from deck A to deck B.

The selected position is backed up even when the AC power supply is turned off. If the AC power is turned on after the specified backup period has passed, TUNER is selected automatically.

Every time an INPUT SELECTOR key is pressed, the corresponding equipment starts playback.

## CIRCUIT DESCRIPTION

### • TAPE 2 monitoring

When the TAPE 2 key is switched on, the sound of TAPE 2 deck can be monitored regardless of the INPUT SELECTOR position. During TAPE 2 monitoring, the FL tube displays "TAPE 2 MONITOR". TAPE 2 monitoring is canceled by pressing the key again.

The TAPE 2 key is not accepted during TAPE 1 deck is recording. TAPE 2 monitoring selection is also backed up after power off.

### • Electronic volume control (From remote control unit only)

The KC-206 is operated only from the remote control unit, and the volume control circuit does not operate with the key matrix of the microprocessor IC.

The volume is increased or decreased by  $\pm 2$  dB each time the VOLUME UP/DOWN switch on the remote control unit is pressed. Holding the switch depressed varies the volume continuously. When the switch is pressed, the volume setting is indicated graphically on the FL tube display. The volume display characters returns to the previous display after three seconds.

The volume control range is from 0 dB to  $-78$  dB.  $-78$  dB is the sound muting condition. The electronic volume setup is also backed up and, after the backup period, the setup when power is turned on is  $-50$  dB.

### • Electronic balance control

Each time the BALANCE L/R switch is pressed, the sound level of the corresponding channel is reduced by  $-2$  dB. The balance position is shown on the FL tube display. The balance control is provided in 10 steps for each of the L and R channels. At the Leftmost or Rightmost position, the level of the other channel becomes  $-78$  dB. The electronic balance setup is also backed up.

### • Muting (From remote control unit only)

Pressing the MUTING switch on mutes the sound level by  $-20$  dB. The FL tube displays "MUTING" at this time. The muting is canceled by pressing the switch again. The muting setup is also backed up.

### • Power ON/OFF

When the POWER switch is turned on, the high-voltage line is activated and the FL tube display appears in 0.5 second. The sound is muted for 4.5 second after power is turned on, with the volume display graphics flashing. When the POWER switch is turned off from on, all functions used are stored in memory. The power ON/OFF setup is also backed up.

### • EQ REC

The equalizer sound, press the EQ REC switch and can only be recorded with TAPE 1 deck.

### 2. System operation facilities

#### • Easy operation (synchro operations)

The playback of required equipment can be started by just pressing the corresponding INPUT SELECTOR key. In addition, playing a source equipment switches the INPUT SELECTOR automatically. However, this does not occur during recording with TAPE 1 deck.

#### • Remote control operation

The remote control unit allows the control of following operations.

**Numeric keypad:** Functions as the tuner's keypad when the INPUT SELECTOR is set to TUNER, and as the CD player's keypad when it is set to CD.

|                |   |
|----------------|---|
| <b>CD:</b>     | $\triangleright/\ll$ , $\square$ , $\ll$ , $\gg$  |
| <b>TUNER:</b>  | Direct selection, A/B switching, preset station scan, FM, AM                                |
| <b>TAPE A:</b> | $\triangleleft$ , $\triangleright$ , $\ll$ , $\gg$ , $\circ$ , $\square$ , $\square\square$ |
| <b>TAPE B:</b> | $\triangleleft$ , $\triangleright$ , $\ll$ , $\gg$ , $\circ$ , $\square$ , $\square\square$ |
| <b>PHONO:</b>  | $\triangleright$ , $\square$  |
| <b>AMP:</b>    | VOLUME UP/DOWN, MUTING, PHONO, CD, TUNER, VIDEO 1, VIDEO 2, TAPE 1, TAPE 2                  |

#### • Operation indicators

With the CD player or turntable, " $\triangleright$ " on the FL tube display lights when playing starts, and " $\square\square$ " lights when in the Pause or Cuing mode. With TAPE 1 decks, " $\blacksquare$ " lights when deck A is played and " $\blacksquare$ " lights when deck  $\blacksquare$  is played. " $\blacksquare$ " lights during recording of deck A or B, and " $\blacksquare$   $\triangleright$   $\blacksquare$ " lights during dubbing from deck A to deck B.

### 3. Power-On Initialization

When the AC power supply is turned on while the TUNER key is held depressed, the whole content of the backed-up memory is cleared (returning to the First mode).

|                              |          |
|------------------------------|----------|
| • Selector:                  | TUNER    |
| • Electronic volume control: | $-50$ dB |
| • Balance:                   | Center   |
| • Muting:                    | OFF      |
| • TAPE 2 MONITOR:            | OFF      |

### 4. Test Functions

When the Acc power supply is turned on with the TEST pin (pin 29) short-circuited with the GND, the unit is switched on in the Test mode. In this mode, all FL display tubes are lit. Pressing the VOLUME UP/DOWN keys changes the sound level in discontinuous steps between  $-78$  dB  $\longleftrightarrow$   $-26$  dB  $\longleftrightarrow$   $0$  dB, and pressing the BALANCE L/R keys changes the balance discontinuously between L  $\longleftrightarrow$  CENTER  $\longleftrightarrow$  R.

## VOLTAGE TABLES

X85-1030-12

IC1

|   |        |
|---|--------|
| 4 | -15.2V |
| 8 | 15.1V  |

Q4

|   |        |
|---|--------|
| E | -15.2V |
| C | -15.2V |
| B | -14.4V |

Q12

|   |      |
|---|------|
| E | 6V   |
| C | 6V   |
| B | 5.2V |

IC1

|    |        |
|----|--------|
| 1  | 0V     |
| 11 | -14.5V |
| 12 | -9.4V  |
| 13 | -9.4V  |
| 18 | 4.1V   |
| 19 | 14.5V  |

Q5

|   |       |
|---|-------|
| E | 15.1V |
| C | 15.2V |
| B | 14.4V |

Q13

|   |        |
|---|--------|
| E | -27.3V |
| C | 6V     |
| B | -23V   |

IC2

|       |        |
|-------|--------|
| 5,6   | 15.1V  |
| 7     | -15.2V |
| 12,13 | -15.1V |
| 14    | 15.1V  |

Q6

|   |       |
|---|-------|
| E | 0V    |
| C | 15.1V |
| B | 0.6V  |

IC3

|       |        |
|-------|--------|
| 7     | -15.2V |
| 12,13 | -15.1V |
| 14    | 15.1V  |

Q7

|   |        |
|---|--------|
| E | -15.2V |
| C | -26V   |
| B | -15.7V |

IC4

|     |        |
|-----|--------|
| 4,5 | -14.5V |
| 6,7 | -9.6V  |
| 8   | -14.5V |
| 12  | 4.1V   |
| 13  | 14.5V  |

Q8

|   |        |
|---|--------|
| E | 0V     |
| C | -15.7V |
| B | -0.6V  |

IC5,6

|    |        |
|----|--------|
| 18 | 15.1V  |
| 19 | 0V     |
| 20 | -15.2V |

Q9

|   |       |
|---|-------|
| E | 5V    |
| C | 15.6V |
| B | 5.6V  |

IC7

|   |        |
|---|--------|
| 4 | -15.2V |
| 8 | 15.1V  |

Q10

|   |       |
|---|-------|
| E | 15.1V |
| C | 22V   |
| B | 15.6V |

IC8

|    |        |
|----|--------|
| 56 | -27.7V |
| 64 | 5.1V   |

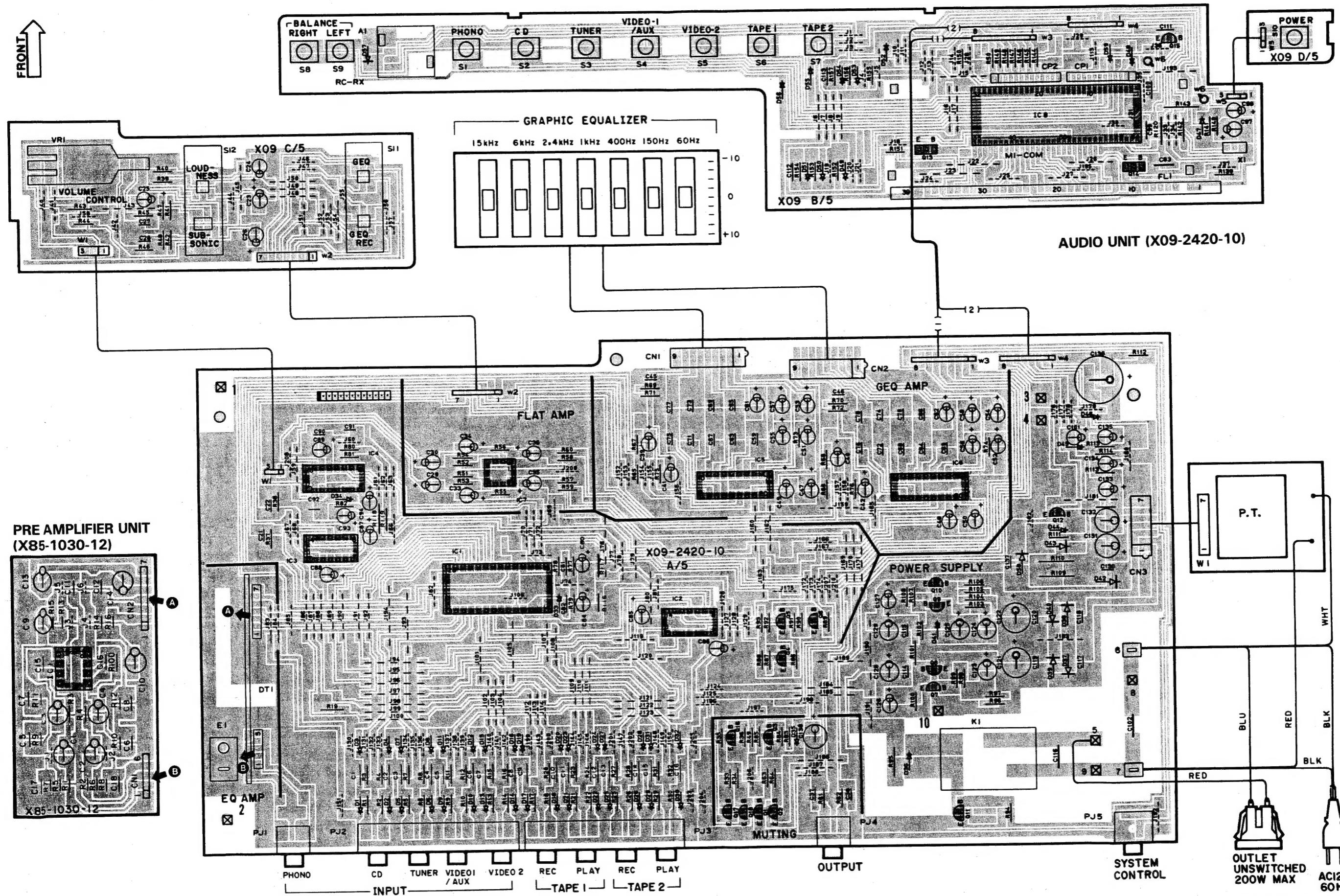
FL1

|   |        |
|---|--------|
| 8 | -27.3V |
|---|--------|

### Component side view

## P.C. BOARD

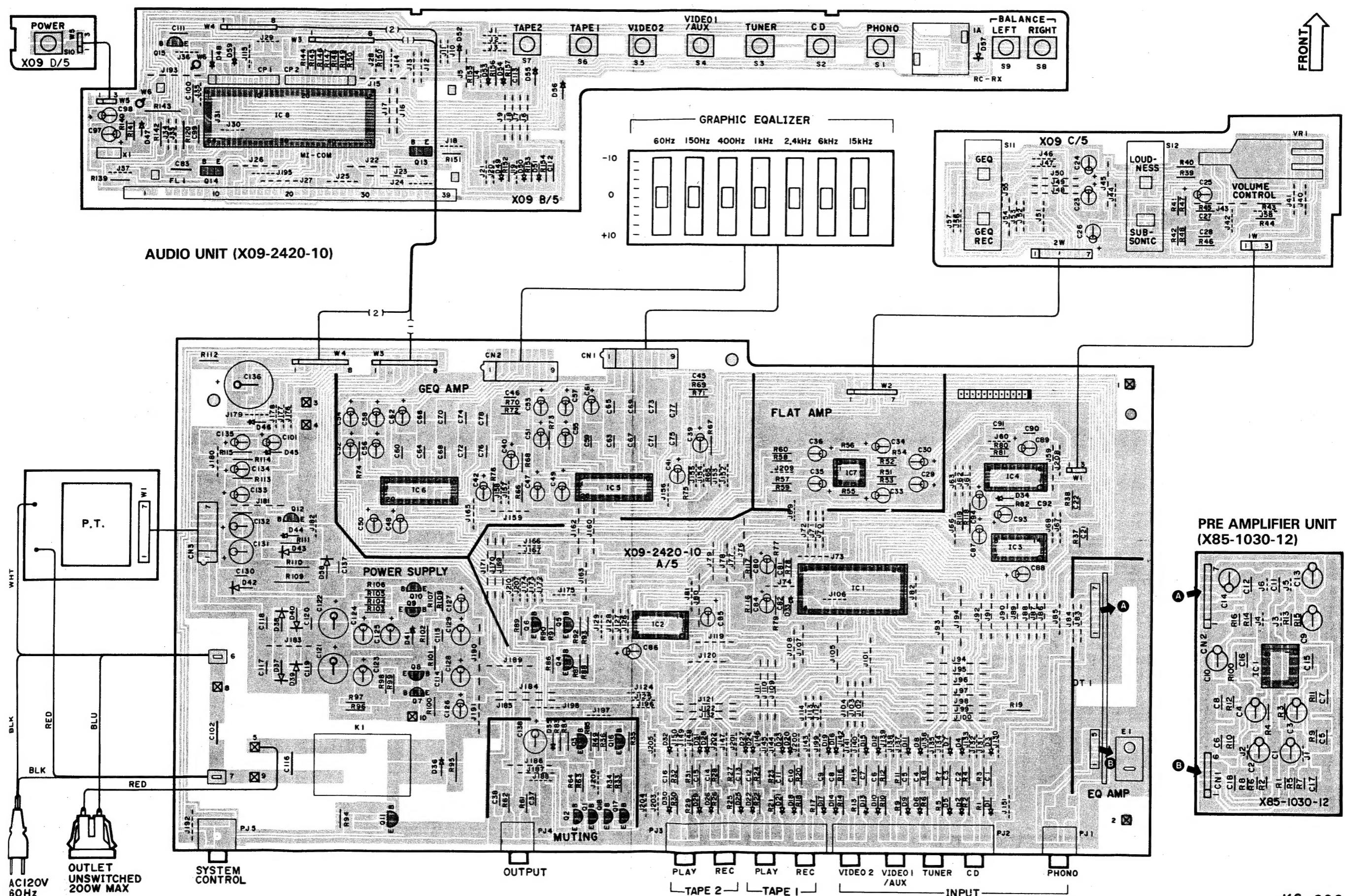
FRONT

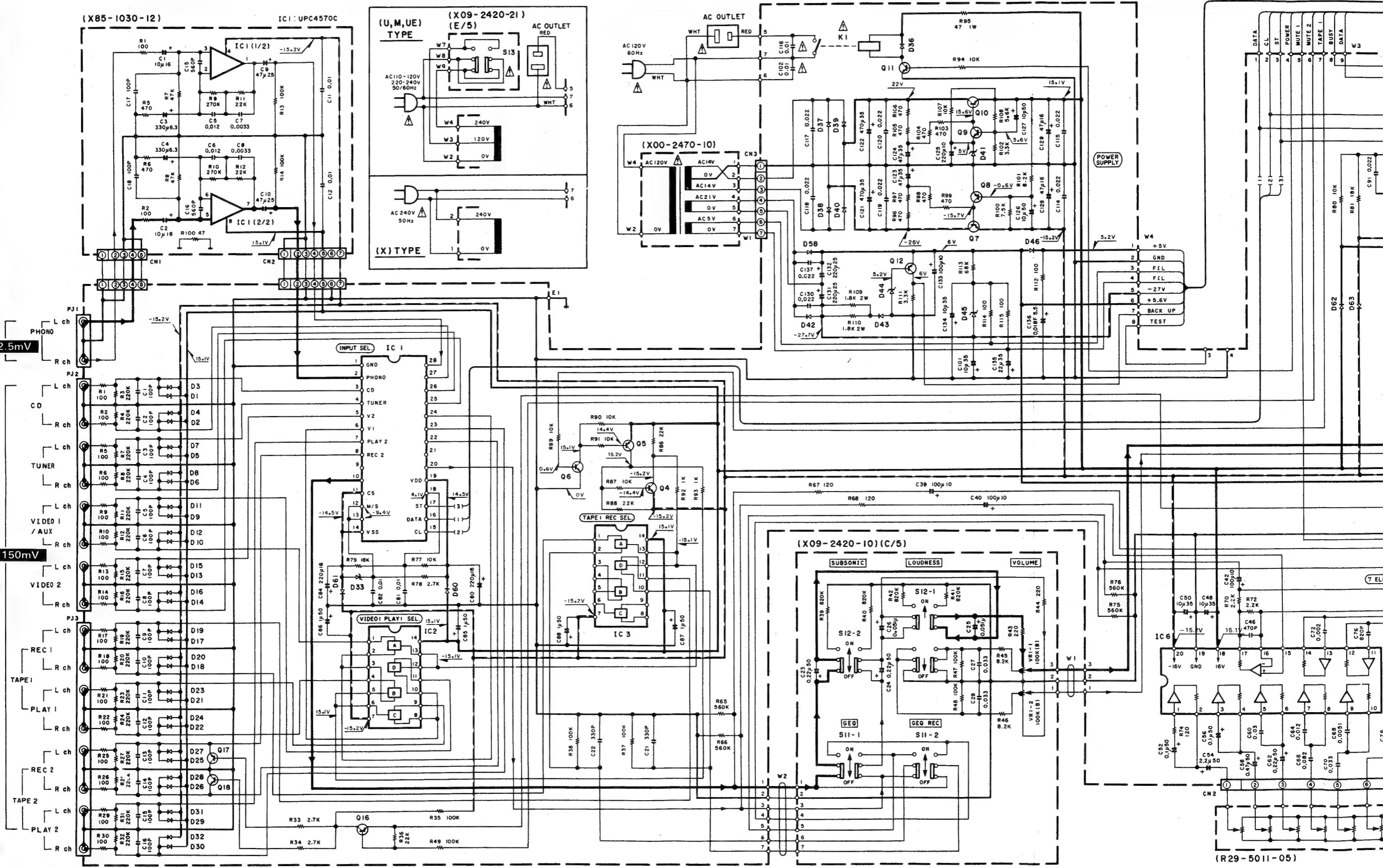


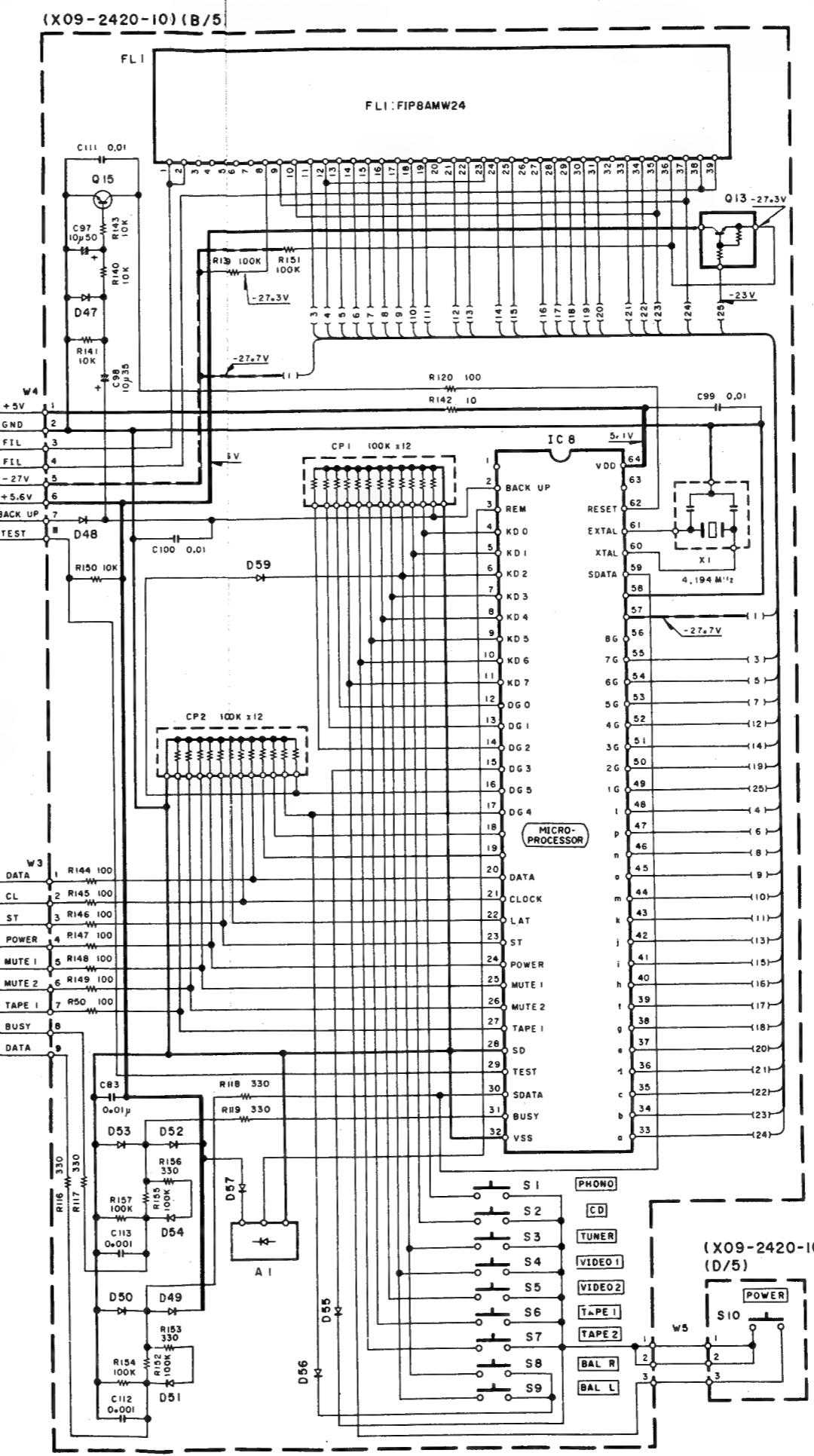
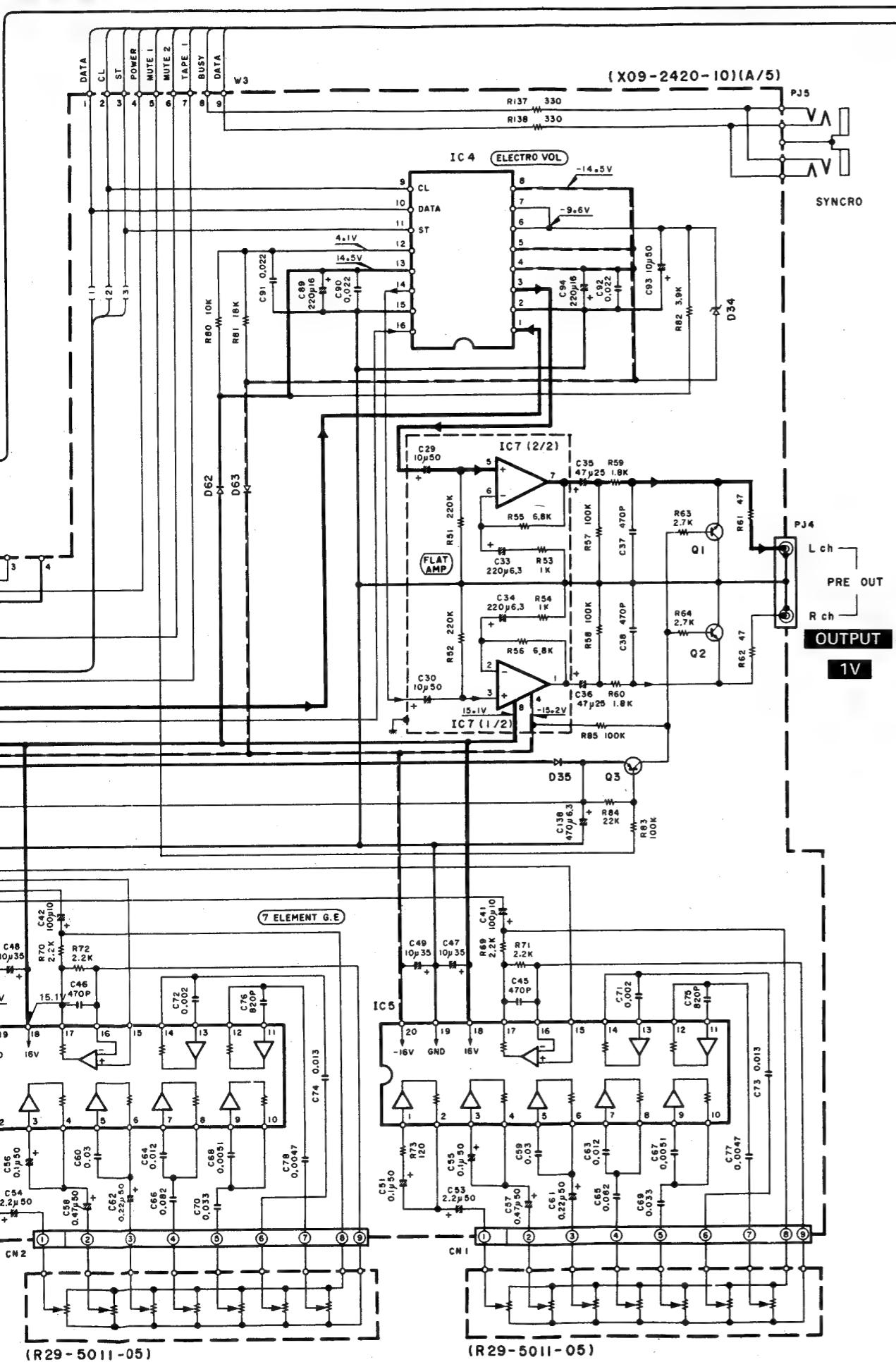
K L M N O P Q R S T

Foil side view

P.C. BOARD







— SIGNAL LINE  
— GND LINE  
— +B LINE  
— -B LINE

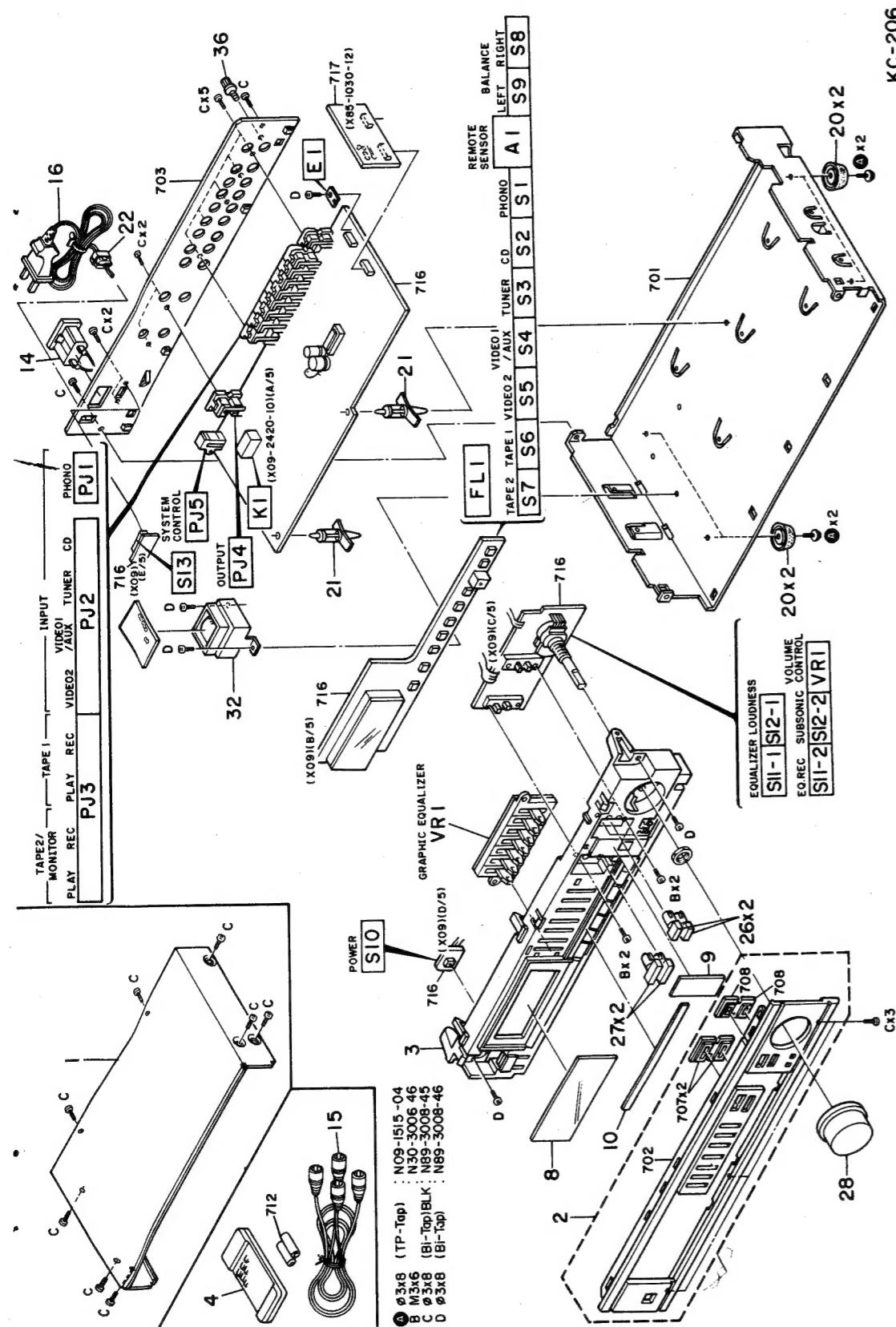
DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

**CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).**  **Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.**

## EXPLODED VIEW



Parts with the exploded numbers larger than 700 are not supplied.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

| Ref. No.                        | Address | New Parts | Parts No.     | Description                       | Desti-<br>nation | Re-<br>marks |
|---------------------------------|---------|-----------|---------------|-----------------------------------|------------------|--------------|
| 參照番号                            | 位 置     | 新         | 部品番号          | 部品名 / 規 格                         | 仕                | 向            |
| <b>KC-206</b>                   |         |           |               |                                   |                  |              |
| 1                               | 1A      | *         | A01-1549-01   | METALLIC CABINET                  |                  |              |
| 2                               | 2A      | *         | A20-5146-02   | PANEL ASSY                        | KUUE             |              |
| 3                               | 1A      | *         | A22-0650-02   | SUB PANEL ASSY                    |                  |              |
| 4                               | 1A      | *         | A70-0163-15   | REMOTE CONTROLLER ASSY            |                  |              |
| 4                               | 1A      | *         | A70-0164-05   | REMOTE CONTROLLER ASSY            | PMX              |              |
| 8                               | 2A      | *         | B03-2218-04   | DRESSING PLATE (DISPLAY)          |                  |              |
| 9                               | 2A      | *         | B03-2219-04   | DRESSING PLATE (REMOTE SENSOR)    | K                |              |
| 10                              | 2A      | *         | B03-2220-04   | DRESSING PLATE (TAPE, VISEO, ETC) | UUE              |              |
|                                 |         |           | B46-0092-03   | WARRANTY CARD                     | X                |              |
|                                 |         |           | B46-0094-03   | WARRANTY CARD                     | P                |              |
|                                 |         | *         | B46-0095-03   | WARRANTY CARD                     | UUE              |              |
|                                 |         | *         | B46-0096-13   | WARRANTY CARD                     | X                |              |
|                                 |         | *         | B46-0121-03   | WARRANTY CARD                     | P                |              |
|                                 |         | *         | B50-6721-00   | INSTRUCTION MANUAL (ENGLISH)      | UUE              |              |
|                                 |         | *         | B50-6722-00   | INSTRUCTION MANUAL (FRENCH)       | PMX              |              |
|                                 |         | *         | B50-6723-00   | INSTRUCTION MANUAL (SPANISH)      | M                |              |
|                                 |         | *         | B50-6724-00   | INSTRUCTION MANUAL (ARABIC)       | M                |              |
|                                 |         | *         | B58-0223-04   | CAUTION CARD (PRE-SET 120V)       | U                |              |
|                                 |         | *         | B58-0269-04   | CAUTION CARD                      | K                |              |
|                                 |         | *         | B58-0513-04   | CAUTION CARD (PRESET220-240)      | UE               |              |
|                                 |         | *         | B59-0092-00   | SERVICE DIRECTORY                 | UUE              |              |
| 14                              | 1C      |           | E03-0041-05   | AC OUTLET                         | KPUMUE           |              |
| 15                              | 1A      |           | E30-0505-05   | AUDIO CORD                        |                  |              |
| 16                              | 1C      |           | E30-0812-05   | AC POWER CORD                     | UMUE             |              |
| 16                              | 1C      |           | E30-0996-05   | AC POWER CORD                     | KP               |              |
| 16                              | 1C      |           | E30-1341-05   | AC POWER CORD                     | X                |              |
|                                 |         | *         | H01-7527-04   | ITEM CARTON CASE                  |                  |              |
|                                 |         | *         | H10-3362-02   | POLYSTYRENE FOAMED FIXTURE        |                  |              |
|                                 |         | *         | H12-1161-04   | PACKING FIXTURE                   |                  |              |
|                                 |         | *         | H25-0148-04   | PROTECTION BAG (110X230X0.07)     |                  |              |
|                                 |         | *         | H25-0223-04   | PROTECTION BAG (750X350X0.03)     |                  |              |
|                                 |         |           | H25-0232-04   | PROTECTION BAG (235X350X0.03)     |                  |              |
| 20                              | 2B, 2C  |           | J02-0170-04   | FOOT                              |                  |              |
| 21                              | 1B, 1C  |           | J19-0514-05   | UNIT HOLDER                       |                  |              |
| 22                              | 1C      |           | J42-0083-05   | POWER CORD BUSHING                |                  |              |
|                                 |         |           | J61-0307-05   | WIRE BAND                         |                  |              |
| 26                              | 2A      |           | K27-1720-04   | KNOB (BUTTON) LOUDNESS, SUBSONIC  |                  |              |
| 27                              | 2A      |           | K27-1726-04   | KNOB (BUTTON) EQ, EQ. REC         |                  |              |
| 28                              | 2A      |           | K29-2505-04   | KNOB (VOLUME CONTROL)             |                  |              |
| 32                              | 1B      | *         | L01-7791-05   | POWER TRANSFORMER                 | KP               |              |
| 32                              | 1B      | *         | L01-7794-05   | POWER TRANSFORMER                 | UMUE             |              |
| 32                              | 1B      | *         | L01-7797-05   | POWER TRANSFORMER                 | X                |              |
| 36                              | 1C      |           | N08-0128-35   | BINDING POST (GND)                |                  |              |
| A                               | 2B, 2C  |           | N09-1515-05   | TAPPING SCREW (Ø3X8)              |                  |              |
| VR1                             | 1B      |           | R29-5011-05   | POTENTIOMETER (GRAPHIC EQ)        |                  |              |
| IC1                             |         |           | M50461-057SP  | IC (REMOTE CONTROLLER)            | KUUE             |              |
| <b>AUDIO UNIT (X09-2420-10)</b> |         |           |               |                                   |                  |              |
| C1 -16                          |         |           | C91-0745-05   | CERAMIC                           | 100PF            | K            |
| C21 ,22                         |         |           | CC45FSL1H331J | CERAMIC                           | 330PF            | J            |

E: Scandinavia & Europe K: USA P: Canada

U: PX(Far East, Hawaii) T: England M: Other Areas

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\* New Parts  
Parts with  
Les articles non  
Telle ohne F

| Ref. No. | 參照番号 |
|----------|------|
| C23      | 24   |
| C25      | 25   |
| C27      | 28   |
| C29      | 30   |
| C33      | 34   |
| C35      | 36   |
| C37      | 38   |
| C39      | 44   |
| C45      | 46   |
| C47      | 50   |
| C51      | 52   |
| C53      | 55   |
| C55      | 56   |
| C57      | 51   |
| C59      | 60   |
| C61      | 61   |
| C63      | 64   |
| C65      | 66   |
| C67      | 68   |
| C69      | 70   |
| C71      | 71   |
| C73      | 72   |
| C75      | 71   |
| C77      | 78   |
| C80      | 79   |
| C81      | 80   |
| C84      | 84   |
| C85      | 86   |
| C89      | 90   |
| C90      | 91   |
| C93      |      |
| C94      |      |
| C97      |      |
| C98      |      |
| C99      | 10   |
| C101     |      |
| C102     |      |
| C111     |      |
| C112,1   |      |
| C114,1   |      |
| C116     |      |
| C117-1   |      |
| C121,1   |      |
| C123,1   |      |
| C125     |      |
| C126,12  |      |
| C128,17  |      |
| C130     |      |
| C131,1   |      |
| C133     |      |
| C134     |      |
| C135     |      |
| C136     |      |
| C137     |      |
| C138     |      |

E: Sc

U: PX

E: Sc

## PARTS LIST

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| Ref. No. | Address | New Parts | Parts No.    | Description |         |       | Desti-nation | Re-marks |
|----------|---------|-----------|--------------|-------------|---------|-------|--------------|----------|
| 参考番号     | 位置      | 新         | 部品番号         | 部品名 / 規格    |         |       | 仕向           | 備考       |
| C23 ,24  |         |           | CEO4KW1HR22M | ELECTRO     | 0.22UF  | 50WV  |              |          |
| C25 ,26  |         |           | CF92FV1H513J | MF          | 0.051UF | J     |              |          |
| C27 ,28  |         |           | CF92FV1H333J | MF          | 0.033UF | J     |              |          |
| C29 ,30  |         |           | CEO4KW1H100M | ELECTRO     | 10UF    | 50WV  |              |          |
| C33 ,34  |         |           | CEO4KWOJ221M | ELECTRO     | 220UF   | 6.3WV |              |          |
| C35 ,36  |         |           | CEO4KW1E470M | ELECTRO     | 47UF    | 25WV  |              |          |
| C37 ,38  |         |           | CK45FB1H471K | CERAMIC     | 470PF   | K     |              |          |
| C39 ,42  |         |           | CEO4KW1A101M | ELECTRO     | 1000UF  | 10WV  |              |          |
| C45 ,46  |         |           | CK45FB1H471K | CERAMIC     | 470PF   | K     |              |          |
| C47 ,50  |         |           | CEO4KW1V100M | ELECTRO     | 10UF    | 35WV  |              |          |
| C51 ,52  |         |           | CEO4KW1H0R1M | ELECTRO     | 0.1UF   | 50WV  |              |          |
| C53 ,54  |         |           | CEO4KW1H2R2M | ELECTRO     | 2.2UF   | 50WV  |              |          |
| C55 ,56  |         |           | CEO4KW1H0R1M | ELECTRO     | 0.1UF   | 50WV  |              |          |
| C57 ,58  |         |           | CEO4KW1HR47M | ELECTRO     | 0.47UF  | 50WV  |              |          |
| C59 ,60  |         |           | CF92FV1H303J | MF          | 0.030UF | J     |              |          |
| C61 ,62  |         |           | CEO4KW1HR22M | ELECTRO     | 0.22UF  | 50WV  |              |          |
| C63 ,64  |         |           | CF92FV1H123J | MF          | 0.012UF | J     |              |          |
| C65 ,66  |         |           | CF92FV1H823J | MF          | 0.082UF | J     |              |          |
| C67 ,68  |         |           | CF92FV1H512J | MF          | 5100PF  | J     |              |          |
| C69 ,70  |         |           | CF92FV1H333J | MF          | 0.033UF | J     |              |          |
| C71 ,72  |         |           | CF92FV1H202J | MF          | 2000PF  | J     |              |          |
| C73 ,74  |         |           | CF92FV1H133J | MF          | 0.013UF | J     |              |          |
| C75 ,76  |         |           | CK45FB1H821K | CERAMIC     | 820PF   | K     |              |          |
| C77 ,78  |         |           | CF92FV1H472J | MF          | 4700PF  | J     |              |          |
| C80      |         |           | CEO4KW1C221M | ELECTRO     | 220UF   | 16WV  |              |          |
| C81 ,83  |         |           | C91-0769-05  | CERAMIC     | 0.01UF  | M     |              |          |
| C84      |         |           | CEO4KW1C221M | ELECTRO     | 220UF   | 16WV  |              |          |
| C85 ,88  |         |           | CEO4KW1H010M | ELECTRO     | 1.0UF   | 50WV  |              |          |
| C89      |         |           | CEO4KW1C221M | ELECTRO     | 220UF   | 16WV  |              |          |
| C90 ,92  |         |           | CK45FF1H223Z | CERAMIC     | 0.022UF | Z     |              |          |
| C93      |         |           | CEO4KW1H100M | ELECTRO     | 10UF    | 50WV  |              |          |
| C94      |         |           | CEO4KW1C221M | ELECTRO     | 220UF   | 16WV  |              |          |
| C97      |         |           | CEO4KW1H100M | ELECTRO     | 10UF    | 50WV  |              |          |
| C98      |         |           | CEO4KW1V100M | ELECTRO     | 10UF    | 35WV  |              |          |
| C99 ,100 |         |           | C91-0769-05  | CERAMIC     | 0.01UF  | M     |              |          |
| C101     |         |           | CEO4KW1V100M | ELECTRO     | 10UF    | 35WV  |              |          |
| C102     |         |           | C91-0647-05  | CERAMIC     | 0.01UF  | P     |              |          |
| C111     |         |           | C91-0769-05  | CERAMIC     | 0.01UF  | M     |              |          |
| C112,113 |         |           | C91-0757-05  | CERAMIC     | 0.001UF | K     |              |          |
| C114,115 |         |           | CK45FF1H223Z | CERAMIC     | 0.022UF | Z     |              |          |
| C116     |         |           | C91-0647-05  | CERAMIC     | 0.01UF  | P     |              |          |
| C117-120 |         |           | CK45FF1H223Z | CERAMIC     | 0.022UF | Z     |              |          |
| C121,122 |         |           | CEO4KW1V471M | ELECTRO     | 470UF   | 35WV  |              |          |
| C123,124 |         |           | CEO4KW1V470M | ELECTRO     | 47UF    | 35WV  |              |          |
| C125     |         |           | CEO4KW1A221M | ELECTRO     | 220UF   | 10WV  |              |          |
| C126,127 |         |           | CEO4KW1H100M | ELECTRO     | 10UF    | 50WV  |              |          |
| C128,129 |         |           | CEO4KW1C470M | ELECTRO     | 47UF    | 16WV  |              |          |
| C130     |         |           | CK45FF1H223Z | CERAMIC     | 0.022UF | Z     |              |          |
| C131,132 |         |           | CEO4KW1E221M | ELECTRO     | 220UF   | 25WV  |              |          |
| C133     |         |           | CEO4KW1A101M | ELECTRO     | 100UF   | 10WV  |              |          |
| C134     |         |           | CEO4KW1V100M | ELECTRO     | 10UF    | 35WV  |              |          |
| C135     |         |           | CEO4KW1V220M | ELECTRO     | 22UF    | 35WV  |              |          |
| C136     |         |           | C90-1416-05  | ELECTRO     | 18UF    | 5.5WV |              |          |
| C137     |         |           | CK45FF1H223Z | CERAMIC     | 0.022UF | Z     |              |          |
| C138     |         |           | CEO4KWOJ471M | ELECTRO     | 470UF   | 6.3WV |              |          |

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| Ref. No. | Address | New Parts | Parts No.    | Description                     |  |  | Desti-nation | Re-marks |
|----------|---------|-----------|--------------|---------------------------------|--|--|--------------|----------|
| 参考番号     | 位置      | 新         | 部品番号         | 部品名 / 規格                        |  |  | 仕向           | 備考       |
| E1       |         | 1C        | E23-0149-05  | TERMINAL                        |  |  |              |          |
| PJ1      |         | 1B        | E13-0229-05  | PHONE JACK(2P) PHONO            |  |  |              |          |
| PJ2 ,3   |         | 1B        | E13-0814-05  | PHONE JACK(8P) INPUT, TAPE      |  |  |              |          |
| PJ4      |         | 1B        | E13-0235-05  | PHONE JACK(2P) OUTPUT           |  |  |              |          |
| PJ5      |         | 1B        | E11-0165-05  | MINIATURE PHONE JACK            |  |  | UMUE         |          |
| PJ5      |         | 1B        | E11-0168-05  | MINIATURE PHONE JACK            |  |  | KPX          |          |
| X1       |         |           | L78-0209-05  | RESONATOR (4.194MHZ)            |  |  |              |          |
| CP1 ,2   |         |           | R90-0479-05  | MULTIPLE RESISTOR               |  |  |              |          |
| R95      |         |           | RS14KB3A470J | FL-PROOF RS 47 J 1W             |  |  |              |          |
| R109,110 |         |           | RS14KB3D182J | FL-PROOF RS 1.8K J 2W           |  |  |              |          |
| VR1      |         | 2B        | RO6-5157-05  | POTENTIOMETER (VOLUME CONTROL)  |  |  |              |          |
| K1       |         | 1B        | S51-1036-05  | MAGNETIC RELAY                  |  |  |              |          |
| S1 ,10   |         | 1A,2C     | S40-1064-05  | PUSH SWITCH                     |  |  |              |          |
| S11      |         | 2B        | S42-2143-05  | MULTIPLE PUSH SWITCH(EQUALIZER) |  |  |              |          |
| S12      |         | 2B        | S42-2155-05  | MULTIPLE PUSH SWITCH(EQ. REC)   |  |  |              |          |
| S13      |         | 1B        | S31-2083-05  | SLIDE SWITCH (POWER TYPE)       |  |  | UMUE         |          |
| D1 ,32   |         |           | 1SS133       | DIODE                           |  |  |              |          |
| D1 ,32   |         |           | 1SS176       | DIODE                           |  |  |              |          |
| D33 ,34  |         |           | HZ55.1N(B2)  | ZENER DIODE                     |  |  |              |          |
| D33 ,34  |         |           | RD5.1ES(B2)  | ZENER DIODE                     |  |  |              |          |
| D35      |         |           | 1SS133       | DIODE                           |  |  |              |          |
| D35      |         |           | 1SS176       | DIODE                           |  |  |              |          |
| D36      |         |           | 1SS131       | DIODE                           |  |  |              |          |
| D36      |         |           | 1SS178       | DIODE                           |  |  |              |          |
| D37 ,40  |         |           | DSM1A1       | DIODE                           |  |  |              |          |
| D41      |         |           | HZ55.1N(B2)  | ZENER DIODE                     |  |  |              |          |
| D41      |         |           | RD5.1ES(B2)  | ZENER DIODE                     |  |  |              |          |
| D42 ,43  |         |           | DSM1A1       | DIODE                           |  |  |              |          |
| D44      |         |           | HZ55.1N(B2)  | ZENER DIODE                     |  |  |              |          |
| D44      |         |           | RD5.1ES(B2)  | ZENER DIODE                     |  |  |              |          |
| D45      |         |           | HZ56.2N(B2)  | ZENER DIODE                     |  |  |              |          |
| D45      |         |           | RD6.2ES(B2)  |                                 |  |  |              |          |

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|---|----------------|-------------------|-------------------|-------------------------|---------|-------|-------------------------|--------------------|
| Q6                                      |                |                   | 2SC2320(E,F)      | TRANSISTOR              |         |       |                         |                    |
| Q6                                      |                |                   | 2SC945(A)(Q,P)    | TRANSISTOR              |         |       |                         |                    |
| Q7                                      |                |                   | 2SB941(P)         | TRANSISTOR              |         |       |                         |                    |
| Q8                                      |                |                   | 2SA733(A)(Q,P)    | TRANSISTOR              |         |       |                         |                    |
| Q8                                      |                |                   | 2SA999(E,F)       | TRANSISTOR              |         |       |                         |                    |
| Q9                                      |                |                   | 2SC2320(E,F)      | TRANSISTOR              |         |       |                         |                    |
| Q9                                      |                |                   | 2SC945(A)(Q,P)    | TRANSISTOR              |         |       |                         |                    |
| Q10                                     |                |                   | 2SD1266(P)        | TRANSISTOR              |         |       |                         |                    |
| Q11                                     |                |                   | 2SC3246           | TRANSISTOR              |         |       |                         |                    |
| Q12                                     |                |                   | 2SA1286(H)        | TRANSISTOR              |         |       |                         |                    |
| Q13                                     |                |                   | DTC124EFF         | DIGITAL TRANSISTOR      |         |       |                         |                    |
| Q15                                     |                |                   | 2SC2320(E,F)      | TRANSISTOR              |         |       |                         |                    |
| Q15                                     |                |                   | 2SC945(A)(Q,P)    | TRANSISTOR              |         |       |                         |                    |
| Q16                                     |                |                   | 2SA733(A)(Q,P)    | TRANSISTOR              |         |       |                         |                    |
| Q16                                     |                |                   | 2SA999(E,F)       | TRANSISTOR              |         |       |                         |                    |
| Q17 ,18                                 |                |                   | 2SC2878(B)        | TRANSISTOR              |         |       |                         |                    |
| A1                                      | 2C             |                   | W02-0719-05       | ELECTRIC CIRCUIT MODULE |         |       |                         |                    |
| <b>PRE AMPLIFIER UNIT (X85-1030-12)</b> |                |                   |                   |                         |         |       |                         |                    |
| C1 ,2                                   |                |                   | CEO4FW1C100M      | ELECTRO                 | 10UF    | 16WV  |                         |                    |
| C3 ,4                                   |                |                   | CEO4KW0J331M      | ELECTRO                 | 330UF   | 6.3WV |                         |                    |
| C5                                      |                |                   | CF92FV1H123J      | MF                      | 0.012UF | J     |                         |                    |
| C6                                      |                |                   | CF92FV1H123J      | MF                      | 0.012UF | J     |                         |                    |
| C7                                      |                |                   | CF92FV1H332J      | MF                      | 3300PF  | J     |                         |                    |
| C8                                      |                |                   | CF92FV1H332J      | MF                      | 3300PF  | J     |                         |                    |
| C9 ,10                                  |                |                   | CEO4KW1E470M      | ELECTRO                 | 47UF    | 25WV  |                         |                    |
| C11 ,12                                 |                |                   | CK45FF1H103Z      | CERAMIC                 | 0.010UF | Z     |                         |                    |
| C15 ,16                                 |                |                   | CK45FB1H561K      | CERAMIC                 | 560PF   | K     |                         |                    |
| C17 ,18                                 |                |                   | CC45FSL1H101J     | CERAMIC                 | 100PF   | J     |                         |                    |
| IC1                                     |                |                   | UPC4570C          | IC(OP AMP X2)           |         |       |                         |                    |

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# KC-206

## SPECIFICATIONS

### PERFORMANCE

#### Input Sensitivity/Impedance/Signal-to-Noise Ratio (IHF-A Curve)

PHONO ..... 2.5 mV/47 kohms/79 dB, 85 dB (5.0 mV)

TUNER/AUX/TAPE PLAY/CD/VIDEO ..... 150 mV/33 kohms/103 dB

Maximum Input Voltage for Phono ..... 150 mV (RMS), T.H.D. 0.03% at 1,000 Hz

#### Frequency Response

PHONO ..... RIAA Standard Curve  $\pm$  0.3 dB  
(20 Hz - 20 kHz)

AUX → Out ..... 10 Hz - 70 kHz (-3 dB)

Subsonic Filter ..... 18 Hz, 6 dB/Octave

#### Total Harmonic Distortion

AUX → Out ..... 0.004% at Rated Output

20 Hz ~ 20 kHz ..... 0.003% at Rated Output

1 kHz ..... 0.003% at Rated Output

Output Voltage and Impedance ..... TAPE REC: 150 mV/330 ohms

Loudness Control ..... +8 dB (100 Hz) (at volume -30 dB)

#### Graphic equalizer control

(60 Hz, 150 Hz, 400 Hz, 1 kHz,  
2.4 kHz, 6 kHz, 15 kHz) .....  $\pm$  10 dB

### GENERAL

Power Requirement ..... 60 Hz 120 V (U.S.A. and Canada Model)  
Model sold elsewhere incorporates switch to  
accommodate 50/60 Hz  
110 ~ 120 V/220 ~ 240 V

Power Consumption ..... 12 W

AC Outlet ..... 1 Switched (Except for some areas.)

Dimensions ..... W 420 mm (16-9/16")  
H 89 mm (3-1/2")  
D 273 mm (10-3/4")

Weight (Net) ..... 3.0 kg (6.6 lb)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

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